

Chemical seal type P flange according to EN 1092-1 / B with flushed diaphragm flange

Chemical seals protect the pressure gauge from the intrusion of the measuring medium. It is used when measuring the pressure of solidifying crystallising or aggressive substances (acids, alkalis, etc.) or hot substances (versions with cooler or capillary)

The flanges can be completed with both pressure transmitters and pressure gauges. Connection is by thread, weld or capillary line.

Dimensional standard

- According to **EN 1092-1 / B** (rough sealing surface)
- Other designs according to **EN 1092-1 / x** tongue-groove see separate catalogue sheet

Material

- Diaphragm: stainless steel SS 316L / 1.4435 (other on request)
- Body: stainless steel SS 316L / 1.4404

Working temperature

- Medium (direct connection) -20 ... +100 °C
- Medium (connection with cooler) up to 400°C
- Ambient -20 ... +60°C
- Other conditions on request

Basic types of chemical seal:

- **P25** – flange DN 25 / PN 40
- **P32** – flange DN 32 / PN 40
- **P40** – flange DN 40 / PN 40
- **P50** – flange DN 50 / PN 40
- **P65** – flange DN 65 / PN 40
- **P80** – flange DN 80 / PN 40

The basic types of chemical seals are marked with a grey background in the dimension table.

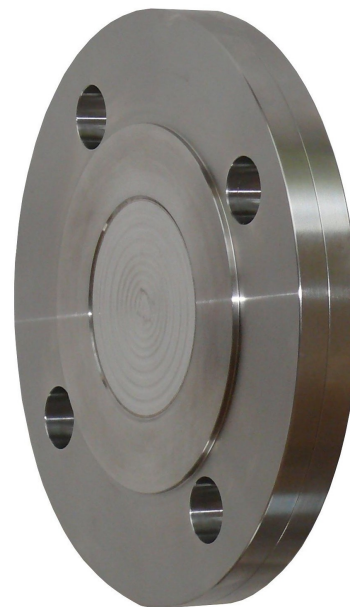
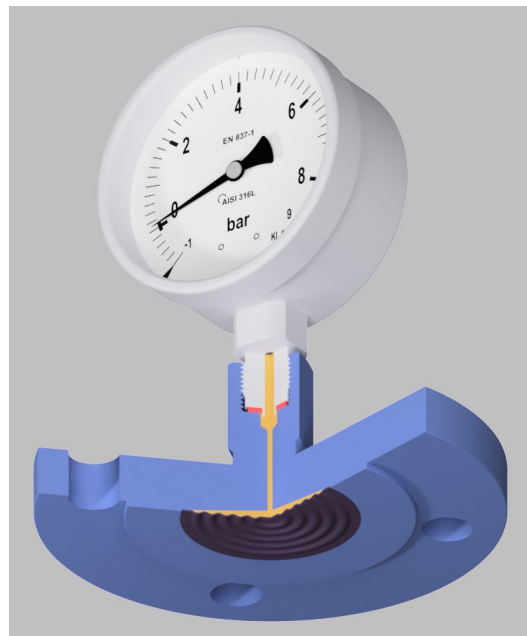
Assembly with measuring instrument:

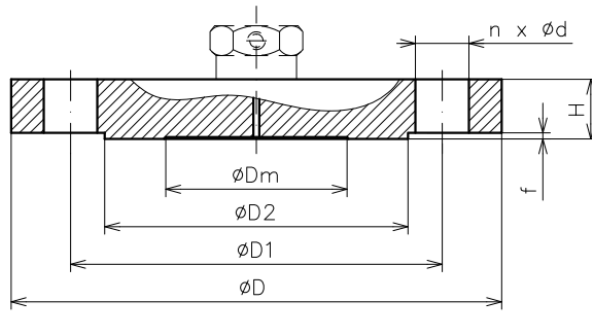
- direct connection (threaded)
- with extended neck
- with cooler (finned, capillary)
- with capillary line (straight or angled connection)

Roughness of the front face:

Type of front surface	Roughness by Ra [µm]	Roughness according to Rz [µm]	Note on design - type B:
A, B1, E, F	3,2 – 12,5	12,5 – 50	B1 is used for PN 2,5-PN 40
B2, C, D, G, H	0,8 – 3,2	3,2 – 12,5	B2 is used for PN 63-PN 100

Dimension table (EN 1092-1/B)





EN 1092-1 / B										
Type BHV	Size		Dimensions (mm)							Number of holes
	DN	PN	$\varnothing Dm$	$\varnothing D$	H	$\varnothing d$	$\varnothing D1$	f	$\varnothing D2$	
P15	15	6	23	80	12	11	55	2	40	4
	15	10/40	23	95	14	14	65	2	47	4
	20	6	28	90	14	11	65	2	50	4
	20	10/40	28	105	16	14	75	2	58	4
P25	25	6	34	100	14	11	75	2	60	4
	25	10/40	34	115	16	14	85	2	68	4
P32	32	6	38	120	14	14	90	2	70	4
	32	10/40	38	140	16	18	100	2	78	4
P40	40	6	48	130	16	14	100	2	80	4
	40	10/40	48	150	18	18	110	3	88	4
	40	63/100	48	170	26	22	125	3	88	4
	40	160	48	170	28	22	125	3	88	4
P50	40	250	48	185	34	26	135	3	88	4
	50	6	60	140	16	14	110	3	90	4
	50	10/40	60	165	20	18	125	3	102	4
	50	63	60	180	26	22	135	3	102	4
	50	100	60	195	28	26	145	3	102	4
P65	50	160	60	195	30	26	145	3	102	4
	50	250	60	200	38	26	150	3	102	8
	65	6	78	160	16	14	130	3	110	4
	65	10/16	78	185	20	18	145	3	122	4
	65	25/40	78	185	22	18	145	3	122	8
P80	65	63	78	205	26	22	160	3	122	8
	65	100	78	220	30	26	170	3	122	8
	80	6	89	190	18	18	150	3	128	4
	80	10/16	89	200	20	18	160	3	138	8
	80	25/40	89	200	24	18	160	3	138	8
P100	80	63	89	215	28	22	170	3	138	8
	80	100	89	230	32	26	180	3	138	8
	80	160	89	230	36	26	180	3	138	8
	80	250	89	255	46	30	200	3	138	8
	100	6	89	210	18	18	170	3	148	4
	100	10/16	89	220	20	18	180	3	158	8
	100	25/40	89	235	24	22	190	3	162	8
P150	100	63	89	250	30	26	200	3	162	8
	100	100	89	265	36	30	210	3	162	8
	100	160	89	265	40	30	210	3	162	8
	100	250	89	300	54	33	235	3	162	8